Montana Department of Environmental Quality

Update

December 2007

Site Response Section

Kalispell Pole & Timber, Reliance Refining Company and Yale Oil Corporation Facilities

What are the Feasibility Study and Proposed Plan?

The Kalispell Pole & Timber (KPT), Reliance Refining Company (Reliance) and Yale Oil Corporation (Yale Oil) facilities (collectively referred to as the "KRY Site") is a Comprehensive Environmental Cleanup and Responsibility Act (CECRA), also known as state Superfund, facility in Flathead County, Montana. The Feasibility Study (FS) for the KRY Site details the cleanup options that could be used to remove contamination. The Proposed Plan is an in-depth look at cleanup options for the KRY Site. The Proposed Plan identifies and explains the preferred cleanup option that protects human health and the environment. This document also summarizes other cleanup options looked at by the Montana Department of Environmental Quality (DEQ) for the KRY Site. DEQ will select the final remedy for the KRY Site and present it in a Record of Decision (ROD) after reviewing and considering all information and comments submitted during the 30-day public comment period on the Proposed Plan, FS, and FS Addendum. A responsiveness summary, which is a written response to all public comments received, will be included in the ROD. The preferred remedy may be revised in response to public comment or new information.

Where can you find the documents?

The Proposed Plan, FS, and FS Addendum are available at the locations listed below. The preferred cleanup option discussed in the Proposed Plan is based on the information found in DEQ's files for the KRY Site. The complete files are available to the public at DEQ's office in Helena, or you may view a shorter list of these resources at the Flathead County Library in Kalispell or on DEQ's website at http://deq.mt.gov/StateSuperfund/kpt.asp.

Montana Department of Environmental Quality
1100 North Last Chance Gulch
Helena, MT 59601
406-841-5000
Monday - Friday: 8:00 am – 5:00 pm

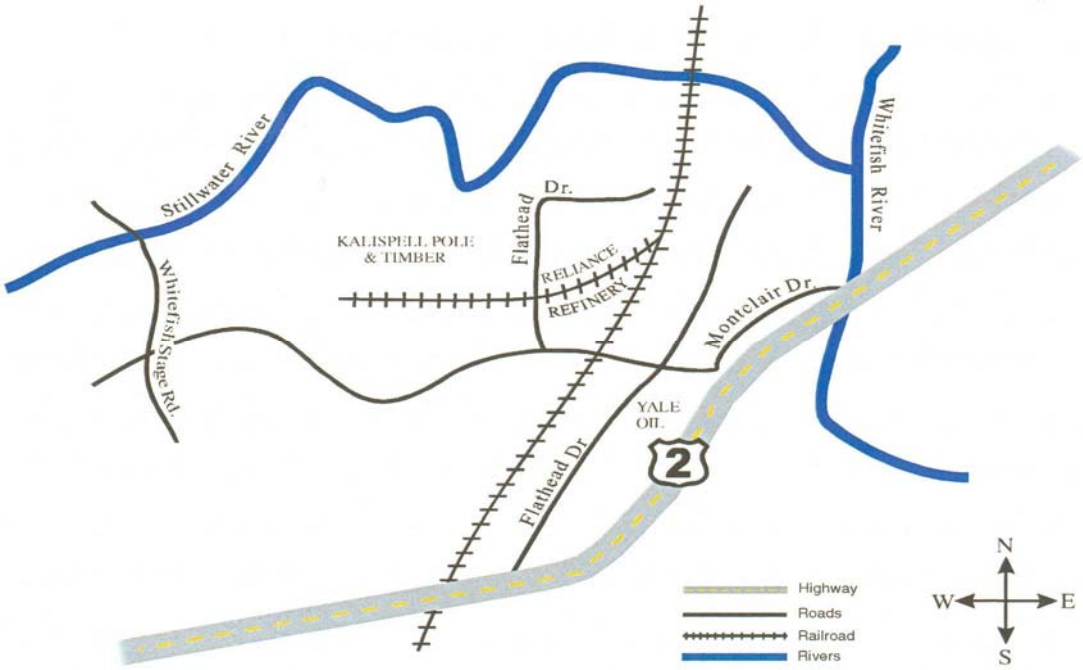
Flathead County Library

247 1st Ave. E.
Kalispell, MT 59901
406-758-5820
Monday – Thursday: 10:00 am – 8:00 pm
Friday: 10:00 am – 5:00 pm
Saturday: 11:00 am – 5:00 pm

Background

The KRY Site is located in the Evergreen area of Kalispell and consists of a former wood treating operation (Kalispell Pole & Timber), historic refinery (Reliance Refining Company) and bulk storage petroleum plant (Yale Oil Corporation). There are residences nearby and some businesses are operating on the facilities.

Groundwater at the KRY Site is contaminated with pentachlorophenol (PCP) and polycyclic aromatic hydrocarbons (PAHs), dioxins/furans, volatile organic compounds (VOCs), petroleum hydrocarbons, and metals. A large area of free-product overlies the groundwater at both the KPT and Reliance facilities, although the characteristics of the product are different at each facility.



Surface and subsurface soils at the KRY Site are contaminated with PCP and PAHs, dioxins/furans, VOCs, petroleum hydrocarbons, and metals. Sludge is also present at the Reliance Facility and an isolated area of buried sawdust exists at the KPT Facility.

Limited surface water and sediment samples were collected from the Stillwater River, which is adjacent to the KPT and Reliance facilities. There were no chemicals detected in sediment samples at levels above sediment screening criteria. However, there were detections of dioxins/furans above screening criteria in surface water. The presence of dioxins/furans above screening criteria in surface water showed potential impacts to the nearby Stillwater River. DEQ's contractor collected more samples of the Stillwater River surface water in October 2007. These samples show that there was no significant difference between dioxin/furan concentrations in the surface water at sample locations throughout the river adjacent to the KRY Site. Therefore, DEQ is not proposing more investigation or cleanup of the river.

Risk Analysis

DEQ determined that the concentrations of contaminants of concern (COCs) at the KRY Site pose unacceptable risks to human health and the environment. DEQ did not quantify those risks but rather developed site-specific cleanup levels for the COCs at the KRY Site. The fact that COCs exceed these cleanup levels further supports the determination that unacceptable risks exist and that cleanup is necessary. DEQ also determined that risks to ecological receptors are unlikely.

Evaluating the Cleanup Options

During the FS, several cleanup options were evaluated to deal with the KRY Site contamination. There were common elements to each option considered: natural attenuation, long-term monitoring, and institutional controls (ICs). Natural attenuation is a treatment method that uses natural processes, along with source removal, to reduce contaminant concentrations through time. Long-term monitoring aids in evaluating the effectiveness of the cleanup and ensures that drinking water wells meet water quality standards. ICs are restrictions on the use of property that mitigate the risks posed to human health. ICs may include restrictive covenants, building restrictions, easements, reservations, and physical mechanisms such as controlled groundwater areas.

State law requires that DEQ consider seven specific criteria when proposing or selecting a cleanup option. The cleanup option must:

1. protect public health, safety, and welfare and the environment; and
2. meet applicable or relevant state and federal environmental requirements, criteria or limitations (ERCLs).

In addition, DEQ must select a cleanup option considering present and reasonably anticipated future uses, giving due consideration to ICs, that:

3. mitigates exposure of risks to public health, safety, and welfare and the environment;
4. is effective and reliable in the short and long-term;
5. is technically practicable and implementable;
6. uses treatment technologies or resource recovery technologies if practicable, giving due consideration to engineering controls; and
7. is cost-effective (to be determined through an analysis of incremental risk reduction and other benefits of alternatives considered, taking into account the total anticipated short-term and long-term costs of cleanup action alternatives considered, including total anticipated cost of operation and maintenance activities).

Cleanup options considered in the FS and Proposed Plan are:

1. No Action
2. Multi-Phase Extraction and Disposal
3. Free-Product (petroleum) Extraction and Disposal
4. Extraction, Ex Situ Treatment and Discharge of Groundwater
5. In Situ Bioremediation of Groundwater and Soil
6. In Situ Chemical Treatment of Groundwater and Soil
7. Soil Barriers
8. Excavation, Off-Site Disposal, and Backfill
9. Excavation, Ex Situ Treatment

The No Action option is used as a baseline to compare the other options against. None of the options would meet all seven criteria on their own. However, a combination of cleanup options will meet the criteria.

The Preferred Remedy

DEQ evaluated the different options and DEQ's preferred remedy for the KRY Site is a combination of Alternative 8 (excavation and offsite disposal), Alternative 9 (excavation, ex-situ treatment, and backfill), and possibly Alternative 7 (soil barriers) for soil. The preferred remedy for groundwater is a combination of Alternative 3 (free-product extraction and disposal), Alternative 6 (chemical oxidation), Alternative 8 (excavation and offsite disposal), and Alternative 9 (excavation, ex-situ treatment, and backfill). The preferred remedy also includes ICs, long-term monitoring, and monitored natural attenuation.

DEQ has determined that the preferred remedy would meet the requirements of state law. The preferred remedy for soil was selected over other alternatives because it is expected to achieve substantial and long-term risk reduction through excavation and treatment, and is expected to allow the property to be used for the reasonably anticipated future land use, which is commercial/industrial. The preferred remedy for groundwater was selected over the other alternatives because it is expected to achieve substantial risk reduction through removal of free-product, treatment of contaminants in the groundwater and provides measures to prevent future exposures to currently contaminated groundwater. The preferred remedy is cost-effective

because it attains the highest level of risk reduction compared to cost. The total present worth value of the preferred remedy is $28,496,174.

Public Involvement

DEQ encourages public comment on the Proposed Plan, FS and FS Addendum. During the public comment period, which ends at 11:59 p.m. on January 5, 2007, the public can comment in writing to the address provided below. A combined public meeting and hearing is scheduled to provide additional information and receive oral comments. Oral comments will not be accepted over the telephone, but you may call Moriah Bucy for additional information at 406-841-5064 or 1-800-246-8198.

Contact Information:	**Public Meeting and Hearing**
Moriah Bucy DEQ-Remediation Division P.O. Box 200901 Helena, MT 59620-0901 or mbucy@mt.gov	Wednesday, December 19, 2007 Cafeteria Gymnasium Evergreen School 18 West Evergreen Kalispell, Montana 7:00 p.m.

DEQ will make reasonable accommodations for persons with disabilities who wish to participate in this public meeting. Persons needing an accommodation must notify Moriah Bucy by December 17, 2007 at mbucy@mt.gov, 1-800-246-8198 or 406-841-5064.

Montana Department of
Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901

ADDRESS CORRECTION REQUESTED